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EXAMINER

PHAM, HAI CHI

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,968	Applicant(s) YOSHIMURA ET AL.	
	Examiner Hai C. Pham	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 21-30 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 21-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/30/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/26/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the Abstract is not provided within a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 2, 21-23, 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsurumi et al. (US 2004/0062179).

Regarding claim 1: Tsurumi et al. discloses an optical recording medium 200 comprising a data recording layer 202 which is provided to record contents data upon irradiation of an optical beam (Figs. 1-3), and a visual information recording layer 202 (it is noted that the recording layer 202 is also used as a visual information recording layer) including a visual information recording area provided for recording only visual information, which is visually recognizable by irradiating the optical beam (Figs. 4A-4C & 10), and a visual information management area, i.e. "special area", where first recording layer information indicating that a layer having the first recording layer information is the visual information recording layer, is previously recorded so as to be readable (the predetermined "special area" within the visual information layer 202 is recorded with the information regarding the start position and the end position of a

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previously formed visible image, and thus implying an indication that there is an existence of a visual information recording layer) [0118]-[0120].

Regarding claim 2: Tsurumi et al. also teaches the data recording layer 202 having a data recording area, i.e. data area, for recording the contents data (Fig. 8), and a data management area, i.e. lead-in information area or PMA area, where at least one of second recording layer information indicating that a layer having the second recording layer information is the data recording layer (the lead-in information area or the PMA is recorded with information indicative of the ending position of the previous recorded data, and thus indicates the current layer is the data recording layer) [0101]-[0103] [and recording medium information indicating that the visual information recording layer is provided on the optical recording medium is recorded].

Regarding claims 21 & 22: Tsurumi et al. further teaches the first recording layer information is regularly arranged in the visual information management area (the information indicative of the start and end positions of a previously formed visible image is provided in the special area).

Regarding claim 23: Tsurumi et al. still further teaches any one of visual information management information indicating whether or not record of the visual information exists in the visual information recording area and area information indicative of a recordable area of the visual information is recorded in the visual information management area (the special area is recorded with information indicative of the start and end positions of a previously formed visible image, i.e. indicative of the existence of a recorded visible image, and the end limits of the visible image) [0120].

Regarding claim 29: Tsurumi et al. further teaches the visual information being recorded by irradiating a laser beam on a side of the data recording layer of the optical recording medium (the “special area” being provided on the data recording layer of the optical disc).

6. Claims 1, 2, 24, 25, 29, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Morishima et al. (US 2003/0117932).

Regarding claim 1: Morishima et al. discloses an optical recording medium D comprising a data recording layer 202 which is provided to record contents data upon irradiation of an optical beam (Fig. 1), and a visual information recording layer 205 including a visual information recording area provided for recording only visual information (the thermosensitive layer 205 is provided on the label side of the optical disc to record a visible image), which is visually recognizable by irradiating the optical beam, and a visual information management area, i.e. the outermost circumferential edge of the optical disc D where the ID code of the disc is recorded (Fig. 12) [0113], where first recording layer information (i.e. code ID represented by the reflective regions 301a and non-reflective regions 301b) indicating that a layer having the first recording layer information is the visual information recording layer 205, is previously recorded so as to be readable [0113].

Regarding claim 2: Morishima et al. also teaches the data recording layer 202 having a data recording area for recording the contents data (Fig. 1), and a data management area, i.e. pre-groove, where at least one of second recording layer

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information (ATIP or Absolute Time In Pre-groove data) indicating that a layer having the second recording layer information is the data recording layer (the ATIP data recorded on the data side of the optical disc D indicates the current layer being the data recording layer) [0111] [and recording medium information indicating that the visual information recording layer is provided on the optical recording medium is recorded].

Regarding claim 24: Morishima et al. discloses all the basic limitations of the claimed invention except for the limitations as discussed with regard to claim 1 above, and further teaches an input device, i.e. buffer memory 36, which inputs the visual information to be recorded (Fig. 2), a pickup 10 which is used to record the visual information thus inputted, a visual-information dedicated drive signal generating device, i.e. laser driver 19, which generates a visual-information dedicated drive signal for driving the pickup in accordance with the visual information thus received [0092]-[0093], [0097]-[0098], a first detection device which detects the first recording layer information recorded in the visual information management area of the visual information recording layer (Step Sa3: the disc ID code is read by the optical pickup 10) (Fig. 10) [0113], and a determining device which determines a side where the optical beam is irradiated on the optical recording medium in accordance with the result of the detection by the first detection device (the disc ID code is read by the optical pickup 10 to detect whether the optical disc is facing the label side of the disc) (Fig. 10) [0113], wherein when it is determined by the determining device that the optical beam irradiates the visual information recording layer, the pickup records the visual information on the visual

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information recording layer in accordance with the visual information-dedicated drive signal [0113].

Regarding claim 25: Morishima et al. further teaches a second detecting device which detects the recording medium information recorded in the data management area (Step Sa1: the ATIP data is read from the pre-groove on the data side of the disc) (Fig. 10) [0111], and a second determining device which determines, in accordance with a result of the detection obtained by the second detection device, whether or not it is possible to record visual information onto the optical recording medium, which is irradiated by the optical beam (when the ATIP data can be read indicating that the side of the disc facing the optical pickup 10 is the data side of the disc, where the visible image cannot be recorded) [0112].

Regarding claim 29: Morishima et al. further teaches the visual information being recorded by irradiating a laser beam on a side of the data recording layer of the optical recording medium [103].

Regarding claim 30: Morishima et al. teaches the pickup recording the visual information onto the optical recording medium by irradiating a laser beam on a side of the data recording layer of the optical recording medium [0103].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morishima et al. in view of Anderson et al. (US 6,778,205).

Morishima et al. discloses all the basic limitations of the claimed invention including a contents-data dedicated drive signal generating device that, when the contents data are inputted into the input device, generates a contents-data dedicated drive signal for driving the pickup in accordance with the contents data thus inputted [0093]-[0094].

Morishima et al. fails to teach the data recording pickup that is different from a visual-information recording pickup for recording the visual information and that records the contents data into the data recording layer in accordance with the contents-data dedicated drive signal.

Anderson et al. teaches an optical disc drive comprising a write laser head 108a to record data information on the data side optical disc 112 and a separate labeling write laser head 108b dedicated to write a visible image on the label side of the disc opposite to the data side such that the user is not required to flip the disc to record the label after the data recording on the opposite side of the disc is completed (Fig. 4), wherein the data write laser beam 402 and the labeling write laser beam 404 have different wavelength (col. 5, line 43 through col. 6, line 14).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Morishima et al. by incorporating a data recording pickup different from the visual-information recording pickup as taught by

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Anderson et al. such that the user does not have to flip the disc over for recording on the opposite face as it is required for the case of using a single head for recording both data and image information as suggested by Anderson et al.

9. Claims 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishima et al. in view of Anderson et al. as applied to claim 26 above, and further in view of Eguchi et al. (US 5,473,154).

Morishima et al. in view of Anderson et al. discloses using separate optical pickups having laser light sources of different wavelengths to write data information and image information, respectively, of the opposite faces of the optical disc, but does not explicitly teach the visual information recording pickup having a numerical aperture (NA) lower than that of the data recording pickup (claim 27), and having a wavelength longer than that from the data recording pickup (claim 28).

Regardless, Anderson et al. does teach the labeling write laser beam 404 being significantly wider than the data write laser beam 402, the data recording having a higher density than it is required for labeling (col. 6, line 7-14). Eguchi et al. teaches that in order to obtain a data recording with higher density, it is necessary to shorten the wavelength of the laser beam and/or to increase the numerical aperture NA of the objective lens (col. 1, lines 17-27). In other words, visual information recording pickup having a numerical aperture (NA) lower than that of the data recording pickup, and having a wavelength longer than that from the data recording pickup.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Morishima et al. by incorporating the teaching of Eguchi et al. in providing a longer wavelength laser beam and a lower numerical aperture objective lens for the labeling write laser beam since the visible image writing does not required a high density recording as suggested by Eguchi et al.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Hai C Pham/
Primary Examiner, Art Unit 2861
October 27, 2008